p1029: Box multiplication of linear binomials (v19)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine
like
terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(6x + 3)$ and $(7x + 4)$.

*	6x	3
7x	$42x^2$	21x
4	24x	12

ANSWER: $42x^2 + 45x + 12$

Question 2

Use the box method to multiply $(4x - 9)$ and $(-6x + 5)$.

*	4x	-9
$-6x$	$-24x^2$	$54x$
5	$20x$	-45

ANSWER: $-24x^2 + 74x - 45$

Question 3

Use the box method to multiply $(-3x + 7)$ and $(-5x - 4)$.

*	$-3x$	7
$-5x$	$15x^2$	$-35x$
-4	$12x$	-28

ANSWER: $15x^2 - 23x - 28$